

I Claim:

1. A method for measuring gaps and hollow spaces in motor vehicle body construction, the method which comprises:

introducing a filler element into one of a gap and a hollow space; and

measuring the one of the gap and the hollow space by using an ultrasonic testing unit coupled to the filler element.

2. The method according to claim 1, which comprises:

using, as the filler element, a sealing strip; and

inserting a probe of the ultrasonic testing unit into the sealing strip.

3. The method according to claim 1, which comprises performing the measuring step by using a measurement process as is used for a medical, intravascular ultrasonic measurement.

4. The method according to claim 3, which comprises evaluating a measurement, resulting from the measuring step, with a given resolution by using a signal processing step.

BEST AVAILABLE COPY

5. The method according to claim 1, which comprises determining dimensions of the one of the gap and the hollow space.

6. A device for measuring gaps and hollow spaces in motor vehicle body construction, comprising:

an ultrasonic testing unit having an ultrasonic probe; and

a filler element configured to be introduced in one of a gap and a hollow space to be measured, said filler element enclosing said ultrasonic probe.

7. The device according to claim 6, wherein said ultrasonic probe has a rod-shaped tip.

8. The device according to claim 6, wherein said filler element is an elastomeric filler element.

9. The device according to claim 6, wherein said filler element is a plastomeric filler element.

10. The device according to claim 6, wherein said filler element has a dimensionally unstable body.

BEST AVAILABLE COPY

11. The device according to claim 10, wherein said dimensionally unstable body is a balloon element filled with a material selected from the group consisting of a liquid material and a paste material.

12. The device according to claim 6, wherein said filler element is an expansion element.

BEST AVAILABLE COPY